

I. GENERAL REQUIREMENTS TO SUPPORT OVERALL TRANSPORTATION INTELLIGENCE MISSION

A. Rail Transport

1. The principal requirement in rail transport is for meaningful statistics. Statistics for any time period should be expressed either in absolute figures or in percentages of increase or decrease compared with some other period, either planned or actual performance. Such statistics are needed for the country as a whole, for individual lines, for an area, or for an individual city. (A statement that the Cmsk railroad system hauls as much as the British railroads for a particular year, for instance, is of great value.) Statistics specifically desired are listed below. For all statistics, it is important to have precise translation of all qualifying or descriptive words used in stating the figures.

a. Traffic statistics: tons originated or carried, ton kilometers, carloadings, (all these either total, or for individual commodities), passengers carried, passenger-kilometers.

b. Operating statistics: average or maximum number of trains running on any line per day or over a specified period, capacity of lines, average length of haul of freight, average tonnage per freight car (this can often be computed for an individual line when examples of heavy trains are given, such as: a train of 100 cars carrying 5,000 tons of freight), average or maximum tonnage per train (either gross or net), locomotive fuel and water consumption (total tonnage, or per locomotive-kilometer, per train-kilometer, per ton-kilometer, or any other measure), locomotive-kilometers run, train-kilometers run, average and maximum locomotive run per day (or other period), average or maximum distance run by a freight car per day, turnaround time of freight cars, average and maximum train speed, percentage of reduction of any operating figure as a result of winter conditions or hot boxes, speed of movement (including statements of the length of time taken in moving a particular shipment between two points).

c. Railroad distances: total route kilometers, length of double track, total length of sidings, controlling length of sidings, length of yard tracks, length electrified, length operated with diesel locomotives, narrow gauge and standard gauge lines, length of new lines planned. Length of railroad tele-communication lines, distances equipped with signals of various types. For all these distances, all available information about locations is valuable.

d. Motive power and rolling stock: total number of locomotives, freight and passenger cars; number of each, by type; average age, by type; percentage or number in repair, awaiting repair, in reserve; average number retired from service yearly, average age at retirement; mileage run between repairs of various classes (running repairs, light repairs, heavy repairs); number manufactured annually; imports and exports; number or percentage with: two axles, four axles, automatic brakes, automatic couplers.

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e. Personnel statistics: number of employees, total and for each type of job; number of retirements, new personnel, training school graduates; average or total annual, monthly or hourly wages.

f. Track statistics: length of rail by type, number of ties and amount of ballast replaced annually or per mile of line in existing lines; same figures for installations on new lines.

g. Financial statistics of railroads, income, expenditures, profit, loss, capital investment.

2. Descriptive or explanatory material.

a. Traffic: descriptions of type of traffic moving; problems in the movement of any particular type of traffic; loading, unloading and trans-loading practices; capacity of lines; rates and fares; major routes of traffic flow, either for all traffic in general or for specific commodities.

b. Operations: descriptions of methods of operating trains and locomotives; descriptions of yards and terminals and methods for their operation; operational problems and successes, including winter and desert operating problems; causes for interruptions of traffic; use of signals and communications (especially radio) in yard and train operations.

c. Individual railroads and parts of railroads: description of roadbed, ballast, track, rails, signals, bridges, tunnels, ferries, electrified operating, roundhouses or engine sheds, turntables, coaling and watering facilities, grades, curves, vulnerability, areas subject to flood or other interruption of traffic. New lines, double tracking, dieselization, change of gauge.

d. Motive power and rolling stock: dimensions, descriptive material on new models or modifications of old models, weaknesses or strengths of a specific model or its parts, performance data (miles per ton of coal, ton/miles per locomotive hour, etc.), change of gauge of wheels, types of equipment in foreign trade, repair techniques, repair frequency, shortages and surpluses.

e. Management and personnel: description of managerial, supervisory and administrative structure, duties of supervisors, administrators and various types of operating personnel, methods of technical training for various types of personnel, methods of establishing plans and checking performance under plans.

f. Roadbed and track: descriptions of materials used, average length of life, methods of installation and replacement, repair methods, problems of maintenance and repair in winter and under desert conditions.

B. Highway Transport

1. All information on the extent and condition of inter-city roads, including the mileage and pattern of the existing net, types of surfacing, fuel and repair facilities, as well as on the construction of new roads.

2. Any items indicating the volume and/or character of traffic on inter-city roads. Traffic statistics needed include both national totals and data for individual highways. Commodity movement statistics are also desired.

3. Any items containing information on inventories of motor vehicles, both total and by type and area. Also import and export data on motor vehicles.

4. Any information on requirements of motor transport on other sectors of the economy, such as fuel and tire consumption, steel consumption, etc.

5. Rate, revenue, and cost information, such as freight tariffs, cost of shipment, etc.

6. Performance data for motor vehicles, including operational norms, such as kilometers per vehicle day, average and maximum tons per vehicle unit, average length of haul, average kilometers between major overhauls, and average life of vehicle in terms of road kilometers or ton kilometers.

7. Information on administration and control, including the organizational structure, personnel strength and breakdown by type of employment, as well as on coordination with other forms of transport.

8. Information on the productivity of labor in motor transport.

9. Items having any bearing on the volume and/or nature of capital investment in motor transport.

#### C. Maritime and Inland Water Transport

1. Fleet Inventory - basic inventory and changes in:

a. Number, type, size, capacity, speed, fuel, age, and condition vessels.

b. Launchings, purchases and losses.

c. Distribution of fleet - number, type, size.

2. Operations - information essential to an assessment of capabilities, vulnerabilities, extent of services provided, plans for expansion, and plan fulfillment.

a. Description and identification of major routes and port facilities, including length of wharves, size of cranes, type of warehousing, controlling water depths, and rail and road clearance facilities. Plans for expansion of services or facilities.

b. Cargo handling capacity, type and tonnage handled. Information over wide geographic area desired.

c. Freight and passenger schedules and rates on major routes.

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d. Efficiency of operations, criticism of operations and plans for improvement.

e. Coordination with or conflict between water transport and other transport media, comparison with other carriers.

f. Traffic interruptions, due to weather, political events, etc.

g. Fuel consumption - type, quantity, availability.

h. Vessel maintenance programs, indication of repair capabilities, changes in facilities, availability of spares.

3. Freight and Traffic Statistics - information by major administrative unit, i.e., the Black Sea Fleet or the Lena River Fleet, or by National averages reported on a year basis or as a repetitive series covering a shorter time period.

a. Freight traffic in tons and ton-kilometers broken down by commodity. Where applicable:

- 1) Country of origin.
- 2) Country of destination.
- 3) Bloc freight transiting non-bloc ports, such as Hamburg, Rijeka, Rotterdam.
- 4) Percentage of foreign trade moved in non or other bloc vessels.
- 5) Samples of charter rates (foreign vessels).
- 6) Interchange of traffic with rail at ocean and river ports.
- 7) Seasonal patterns, operational and in types of cargo.

b. Passenger traffic in passengers and passenger kilometers.

4. Statement of financial results of inland water and ocean shipping operations by major administrative units, such as Far Eastern Fleet or Lena River Fleet. Data may be reported on a one year basis or for a shorter period if repetitive series are available:

a. Income.

- 1) Revenue from traffic.
- 2) Other income and allocations from National Budget.

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b. Expense.

- 1) Operating expense (wages, fuel, depreciation, etc.).
- 2) Other expenses.

5. New capital invested in vessels, port improvement, equipment, etc.

6. Statement of value of assets on a national or major administrative unit basis.

7. Personnel data:

- a. Numbers, seagoing and shoreside.
- b. Salaries and bonuses.
- c. Productivity.
- d. Morale.

8. International Shipping Agreements.

D. Air Transport

1. Air Agreements

- a. Bilaterals with members of the Bloc; with non-Bloc countries.
- b. Relations with ICAO; with IATA Interline arrangements.

2. Air Facilities

Information on airports that would affect the operation of the country's air carrier (i.e., improvements to international civil airport or readying facilities for jet operations).

3. Air Equipment

- a. Inventory of civil aircraft according to type.
- b. Transport aircraft types (characteristics and performance).

4. Air Carriers

Transport companies engaged in scheduled transportation.

- a. Headquarters, capitalization, etc.
- b. Service rendered.

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- c. Personnel (numbers for ground and flight personnel, training).
- d. Equipment (for each carrier).
- e. Traffic - air route mileage, passenger and freight kilometers flown per year, etc.
- f. Plans.
- g. Maintenance.
- h. Special services.
- 5. Organization - Government and air line structure.
- 6. Policy
- 7. Who's Who - Personalities in civil aviation.
- 8. Financial Information
  - a. Revenue from traffic.
  - b. Other income and allocations from national budget.
  - c. Operating expenses (wages, fuel, depreciation, etc.)
  - d. Other expenses.
- 9. Rate Information

Rate schedules and individual samples of rates applicable to passengers and freight.

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II. SPECIAL REQUIREMENTS TO SUPPORT 1958 FISCAL YEAR PROJECT RESEARCH PROGRAM

A. Special Requirement for USSR FY 1958 Projects

1. Items having to do with movement of freight overland between the USSR and China; the Satellites and China; the USSR and North Korea and North Vietnam; and the Satellites and North Korea and North Vietnam.
2. Current USSR tariffs and freight shipment regulations, rail, inland water and highway.
3. Books, pamphlets and statements on the use, cost, and productivity of labor on the railroads of the USSR.
4. Items pertaining to standardization of equipment, traffic regulations, and operating practices on railroads and highways of Bloc countries, both in Europe and in Asia.
5. Items pertaining to capital inputs into Soviet Arctic transportation, including land, sea and air. Also, items pertaining to the pattern of transport development in the Soviet Arctic.
6. Any quantitative or qualitative information on petroleum transport in the USSR.
7. Items containing any information on the consumption of electric power or petroleum by the transport sector of the USSR economy.
8. Information dealing with the impact of regionalization on transport in the USSR.
9. Information on any planned or actual revision of Sixth Five Year Plan goals for transport in the USSR.
10. Items dealing with the extent of success in planned modernization of transport facilities in the USSR.
11. Technical information on signaling. Ref.: [REDACTED]

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a. What is the Soviet definition of the following terms used in the referenced item: "centralized control of switches and signals," and "block signals." Note: CTC is operated in at least two major ways:

- 1) In the U.S., a switchboard operator is in complete control of train movements by his control of signals and switches on a section of line. This practically doubles the capacity of a single track line.
- 2) In Great Britain, CTC is operated in conjunction with train orders, and the CTC is merely an additional safety feature. There is little increase in capacity over a line having only block signals when CTC is employed in this way.

b. Is there any other information on the type of signals found on the Trans-Siberian railroad from Omsk to Vladivostok (any information from 130 on would be of value)?

c. How are block signals, CTC, and cab signals used in the operation of trains in the USSR? Our interest is not in the mechanical details of how the signals are controlled, but rather in how trains are operated with each of these types of signaling. Some items of interest in this connection are:

- 1) How long does it take a train to get through one of these blocks? What is the maximum and minimum length of a block?
- 2) Under CTC, is the train controlled entirely by the signal indications; or does the train operate under train orders and is the CTC merely an additional safety measure; or does CTC mean something different from its meaning in the U.S.?

d. By how much is the capacity of a line increased in the USSR when block signals or CTC (which includes block signals) are installed?

12. Information on the coordination of air line services of the USSR and European Satellites - coverage of meetings held several times a year at which schedules are probably dovetailed and revenues shared.

13. Any information bearing on the use of the IATA clearing house by members of the Bloc.

14. Currency adjustments in air fares and cargo rates within the Bloc looking toward services outside the Bloc.

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15. Transport aircraft inventory in the USSR (non-military).
16. Yearly performance figures--details of fulfillment of plans.
17. Information on the personnel complement of Aeroflot broken down into flight, ground, administration categories.
18. Details available on new aircraft types, when they are put in production, when put into service on regularly scheduled routes.

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B. Special Requirements for European Satellite Area for FY 1958.

Background

The study of each country will be a rather definitive study of the characteristics of each mode of inland transport--railroad, highway, inland water, and civil air. There will be an analysis of the demands placed by the economy on the transportation media and the extent to which the systems respond. It will also include an analysis of the various human and material inputs into the transportation system and their efficacy

Requirements

The type information needed for these studies is as follows:

1. Descriptive material on length and location of principal routes by rail, highway, water, air, and pipeline.
2. Information on the administrative organization of the various ministries of transport.
3. Data on inventory of transportation equipment: locomotives, rolling stock, motor vehicles, and vessels. Also, description of current types in use, shifts in emphasis, and maintenance.
4. Information on origin and destination of traffic by mode of transport. This would include the location of originating centers of principal commodities and also the location of principal consuming centers for leading commodities. Traffic flow charts are highly desirable.
5. Data on traffic: ton-kilometers, tons originated, carloadings, number of trains, number of passengers, passenger-kilometers, freight traffic breakdown by commodity, plans, and plan fulfillment. Also, data on operating efficiency--turnaround time, labor productivity, etc. In this connection, we particularly want years not included in published statistical yearbooks of a country. In many cases yearbooks do not include a complete time series or do not have the latest year available. We do want revisions of yearbook data, however.
6. Data on number of persons employed in transportation, investments in transportation, and material used in transportation.
7. Information on future transport plans: new rail lines to be constructed, new roads, conversion to different types of tractive power (i.e., steam locomotives to electric and diesel locomotives).

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C. Special Far East Area Requirements for FY 1958.

In addition to the S/TR basic requirements for all Bloc countries, certain special requirements pertaining to the S/TR FY 58 research program in the Far East are submitted below. The special requirements support the following two S/TR branch projects: (1) Comparative Study of Freight Rates in Communist China; and (2) Determination of the Transport Contribution to the National Income of Communist China, 1950-57. The rate project will be a study of the levels of freight rates in Communist China as they apply to the various modes of transportation. It will include an analysis of the policy of the government in setting rates and their effect on the performance of various means of transportation. The national income project will be a study of the contribution of transportation in Communist China to the economic growth of the country. It will attempt to determine transportation revenue and expenditures for a series of years and the value added for each form of transport. Specific requirements in support of these two projects are as follows:

1. The rate level for each type of transport (rail, highway, inland waterway, coastal shipping, and civil air).
2. Policies governing establishment of the rate level and the function of rate making.
3. Operating revenues by type of transport.
4. Expenditures by type of transport as follows:
  - a. Wage and salary costs.
  - b. Material and equipment costs.
  - c. Fuel costs.
  - d. Repair and maintenance-of-way costs.
  - e. Depreciation.
  - f. Any information concerning net income by type of transport.

In general, additional emphasis should be placed in FY 58 on rate information and on cost data for all forms of transport. Continuing attention to the items listed in the basic requirements is also essential.

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D. Special Requirements for Maritime Studies for FY 1958.

1. Main Topics:

Employment and adequacy of the USSR Dry Cargo Merchant Marine,  
including:

- a. Areas of Operation, both domestic and international.
- b. Inventory of merchant ships by type and area.
- c. Growth in performance
  - 1) Cargo and passengers carried.
  - 2) Ports served.
  - 3) Industries supported.
  - 4) Contribution to GNP.
- d. Trends in capital investment and assets.
- e. Adequacy.
  - 1) Operating efficiency.
  - 2) Labor productivity.
- f. Potential development:
  - 1) Traffic growth planned.
  - 2) Domestic shipbuilding potential.
  - 3) Acquisitions abroad.

2. Other Topics:

- a. Petroleum consumption by the Ministry of the Merchant Fleet and the Ministry of the River Fleet, by total for each ministry and by area.
- b. Allocation of water transport facilities to carry consumer goods by area and types of commodities.
- c. Dependence of the USSR on foreign flag shipping to carry its foreign trade.
- d. Rivers and canals:
  - 1) Length - individual and total by country.
  - 2) Condition.
  - 3) Current improvements - plans and actual construction.

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